

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SMARTER AGENT, INC., a Delaware Corporation

Plaintiff,

V.

ULOCATE COMMUNICATIONS, INC., a
Delaware Corporation

Defendant.

C.A. No. _____

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Smarter Agent, Inc. (“Smarter Agent” or “Plaintiff”), by and through its attorneys, herby demands a jury trial and files the following Complaint against Defendant uLocate Communications, Inc. (“uLocate” or “Defendant”) and, in support thereof, alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 271, *et seq.* to enjoin and obtain damages resulting from Defendant's unauthorized manufacture, use, sale, offer to sell and/or importation into the United States for subsequent use or sale of products that infringe one or more claims of United States Patent Nos. 6,385,541 B1, and 6,496,776 B1 (attached hereto as Exhibits A and B, respectively). Plaintiff seeks injunctive relief to prevent Defendant from continuing to infringe these patents. In addition, Plaintiff seeks a recovery of monetary damages resulting from Defendant's past infringement of these patents.

THE PARTIES

2. Plaintiff Smarter Agent, Inc. is a Delaware corporation having its principal place of business at 200 Federal Street, Suite 300, Camden, New Jersey 08103.

3. Defendant uLocate Communications, Inc. is a Delaware corporation having its principal place of business at 10 Langley Road, Suite 202, Newton Center, Massachusetts 02459.

JURISDICTION AND VENUE

4. This is an action for patent infringement that arises under the Patent Laws of the United States, Title 35 of the United States Code, 35 U.S.C. §§271, *et seq.*

5. This court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

6. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b).

GENERAL ALLEGATIONS

7. Smarter Agent is the leading developer of location-based property search technology in the United States. Smarter Agent's technology combines mobile location technology, such as GPS, with information about real estate.

8. United States Patent No. 6,385,541 B1 ("the '541 patent"), entitled "Global Positioning-Based Real Estate Database Access Device and Method," issued on May 7, 2002, to Brad W. Blumberg and Eric M. Blumberg. A copy of the '541 Patent is attached as Exhibit A.

9. United States Patent No. 6,496,776 B1 (“the ‘776 patent), entitled “Position-Based Information Access Device and Method,” issued on December 17, 2002, to Brad W. Blumberg and Eric M. Blumberg. A copy of the ‘776 Patent is attached as Exhibit B.

10. The ‘541 patent and the ‘776 patent are directed to the receipt of information by a wireless device, based on the location of the wireless device. In embodiments of the patents, the receipt of information associated with real estate is disclosed.

11. Smarter Agent is the exclusive licensee of the ‘541 patent and the ‘776 patent, and has been granted the right to enforce the ‘541 patent and ‘776 patent.

12. According to publicly available information, uLocate recently launched its WHERE service, through which users of the WHERE service can obtain through a wireless device information associated with real estate based on the geographic location of the wireless device.

13. In connection with the WHERE service, users download to their wireless device software that enables the WHERE service functionality.

14. uLocate’s WHERE service competes with Smarter Agent’s technology offerings.

COUNT I
(Infringement of US Patent No. 6,385,541 B1)

15. Smarter Agent incorporates by reference the allegations set forth in paragraphs 1 through 14 of this Complaint as though set forth in full herein.

16. On information and belief, uLocate is directly and/or indirectly infringing, literally or under the doctrine of equivalents, the '541 patent by making, using, selling and offering to sell products and/or services that are within the scope of one or more claims of the '541 patent.

17. On information and belief, uLocate's infringement of the '541 patent is and has been willful and deliberate, has caused and will continue to cause damage to Plaintiff, and has caused and will continue to cause Plaintiff irreparable harm for which there is no adequate remedy at law.

18. On information and belief, uLocate intends to continue its unlawful infringing activity unless enjoined by this Court.

COUNT II
(Infringement of US Patent No. 6,496,776 B1)

19. Smarter Agent incorporates by reference the allegations set forth in paragraphs 1 through 18 of this Complaint as though set forth in full herein.

20. On information and belief, uLocate is directly and/or indirectly infringing, literally or under the doctrine of equivalents, the '776 patent by making, using, selling and offering to sell products and/or services that are within the scope of one or more claims of the '776 patent.

21. On information and belief, uLocate's infringement of the '776 patent is and has been willful and deliberate, has caused and will continue to cause damage to Plaintiff, and has caused and will continue to cause Plaintiff irreparable harm for which there is no adequate remedy at law.

22. On information and belief, uLocate intends to continue its unlawful infringing activity unless enjoined by this Court.

PRAYER FOR RELIEF

WHEREFORE, Smarter Agent prays that it have judgment against uLocate for the following:

- (1) A decree that the '541 and '776 patents are valid and enforceable;
- (2) A decree that the '541 patent and the '776 patent are infringed by uLocate;
- (3) An injunction enjoining and restraining uLocate and its affiliates, subsidiaries, officers, directors, employees, agents, representatives, licensees, successors and assigns, and all those acting for it and on its behalf, or acting in concert with it, from making, using, offering to sell, selling, and importing into the United States any product and/or service that falls within the scope of any claim of the '541 patent and/or the '776 patent and for all further and proper injunctive relief;
- (4) An award of compensatory damages to Plaintiff, together with pre-judgment and post-judgment interest and costs;
- (5) An award of treble damages to Plaintiff for uLocate's willful infringement of the '541 patent and '776 patent pursuant to 35 U.S.C. § 284;
- (6) A finding that the case is exceptional and an award of Plaintiff's costs and reasonable attorneys' fees under 35 U.S.C. § 285 or other applicable law; and
- (7) Such other relief, at law or in equity, as the Court deems just and proper.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff

Smarter Agent, Inc. hereby demands trial by jury of all issues triable of right by a jury.



Edmond D. Johnson (De Bar #2257)

Thomas H. Kovach (DE Bar #3964)

PEPPER HAMILTON LLP

Hercules Plaza, Suite 5100

1313 Market Street

P.O. Box 1709

Wilmington, DE 19899-1709

Telephone: (302) 777-6500

Of Counsel

Attorneys for Plaintiff Smarter Agent, Inc.

Jonathan G. Graves
COOLEY GODWARD KRONISH LLP
One Freedom Square
Reston Town Center
11951 Freedom Drive
Reston, Virginia 20190-5656
Telephone: (703) 456-8000

Anthony J. DiMariono, III
A.J. DiMARINO, PC
57 Euclid Street, Suite A
Woodbury, NJ 08096
Telephone: (856) 853-0055

Dated: March 23, 2007

EXHIBIT “A”

(12) **United States Patent**
Blumberg et al.

(10) **Patent No.: US 6,385,541 B1**
(45) **Date of Patent: May 7, 2002**

(54) **GLOBAL POSITIONING-BASED REAL ESTATE DATABASE ACCESS DEVICE AND METHOD**

(76) Inventors: **Brad Wayne Blumberg**, 9 Signal Hill Dr., Voorhees, NJ (US) 08043; **Eric Blumberg**, 103 S. Cambridge Ave., Ventnor, NJ (US) 08906

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/639,265**

(22) Filed: **Aug. 15, 2000**

Related U.S. Application Data

(60) Provisional application No. 60/186,155, filed on Feb. 29, 2000.

(51) **Int. Cl.**⁷ **G01C 21/00**

(52) **U.S. Cl.** **701/213; 701/207; 701/208; 701/214**

(58) **Field of Search** 701/200, 207, 701/208, 213, 214, 24; 340/991, 993; 342/357.06, 357.08, 357.13

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,032,989 A 7/1991 Tornetta

5,594,425 A * 1/1997 Ladner et al. 340/825.06

5,684,859 A 11/1997 Chanroo et al.

5,794,216 A 8/1998 Brown

5,852,810 A 12/1998 Sotiroff et al.

5,930,699 A * 7/1999 Bhatia 455/414

5,938,721 A * 8/1999 Dussell et al. 701/211

5,944,769 A * 8/1999 Musk et al. 701/201

OTHER PUBLICATIONS

“SnapTrack Awarded Patent For Locating or Tracking Wireless Devices Via Internet and Client–Server–Based Computer Networks” <http://famulus.msnbc.com/famuluscom/>

businesswire01–23–050325.asp?sym=QCOM, Jan. 23, 2001.

“Lucent Technologies and Profilium Inc. Announce Alliance Agreement to Deploy Advanced Location–Based Mobile Advertising Solution”, [http://www.hoovershbbh.hoovers.com/bin/story?StoryId=Com0p0bKbytiXmdi&FQ=c . . . %20L](http://www.hoovershbbh.hoovers.com/bin/story?StoryId=Com0p0bKbytiXmdi&FQ=c...%20L) Jan. 23, 2001.

“The Meaning of Telematics”, <http://www.globaltelematics.com/telematics.htm> Oct. 30, 2000.

HomeFinder—Find the Home That’s Right for You from <http://www.homefinder.com>, no date.

Printout from <http://www.homescape.com/buying/>, no date.

zipRealty.com: The zipRealty.com Buyer’s Advantage from http://www.ziprealty.com/buy_a_home/advantage.jsp, no date.

Homes for Sale—MSN HomeAdvisor from <http://homeadvisor.msn.com/homes/overview.asp>, no date.

Realtor.com: Real Estate—Find a new home and a realtor from <http://www.realtor.com/FindHome/default.asp>, no date.

Realtor.com: Real Estate—Homes for Sale in New Jersey from <http://www.realtor.com/newjersey/nbselnj.asp>, no date.

(List continued on next page.)

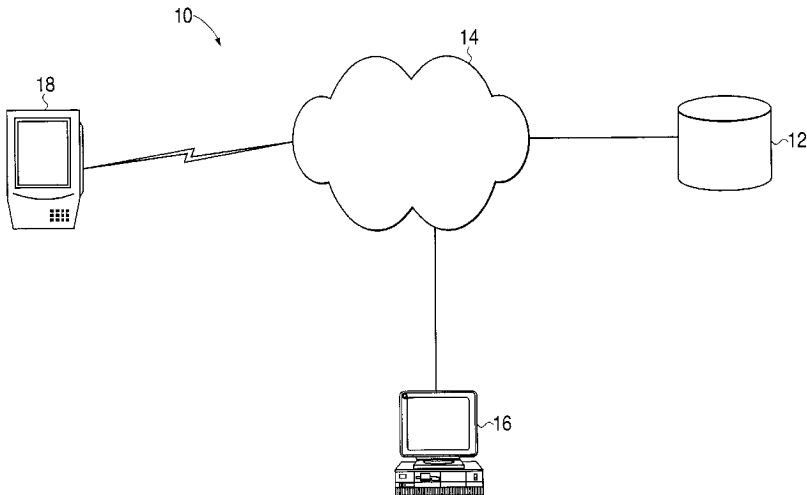
Primary Examiner—Yonel Beaulieu

(74) *Attorney, Agent, or Firm*—Cooley Godward LLP

(57) **ABSTRACT**

A system and method for accessing real estate information over a communications network includes positioning a user at a desired piece of property. A database containing the real estate information is accessible over the communications network, preferably via a wireless device that includes location determination means for determining the geographic position of the user. The wireless device accesses the database via the communications network based upon the current geographic position, and the database returns information relating to the property located proximate to the geographic position of the wireless device.

18 Claims, 4 Drawing Sheets



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OTHER PUBLICATIONS

Realtor.com: Real Estate—Homes for Sale in Atlantic City from <http://www.realtor.com/atlanticcity/nbregion4.asp>, no date.

Realtor.com: Find a Home—Select Property Type from <http://www.realtor.com/PropType.asp?pgnum=1&st=nj&frm=bycomm&mls=atlanticcity&mlsttl=Atlantic+City&comm>, no date.

Realtor.com: Real Estate in Bay Area from <http://www.realtor.com/selectnb.asp?frm=bycomm&st=nj&mls=atlanticcity&mlsttl=Atlantic+City&comm=Bay+Area&>, no date.

Realtor.com: Real Estate—Find a Neighborhood from <http://www.realtor.com/FindNeig/default.asp>, no date.

* cited by examiner

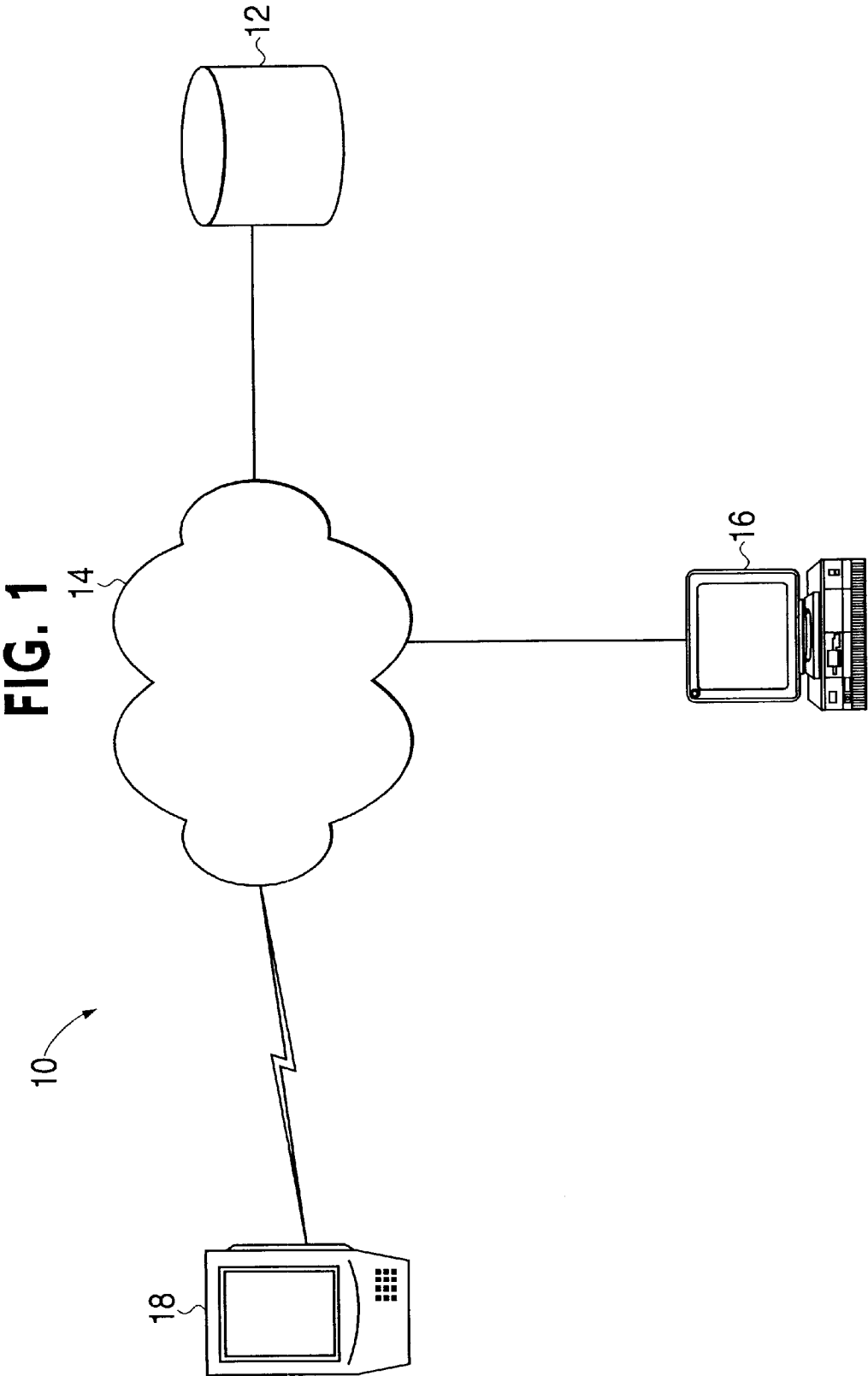
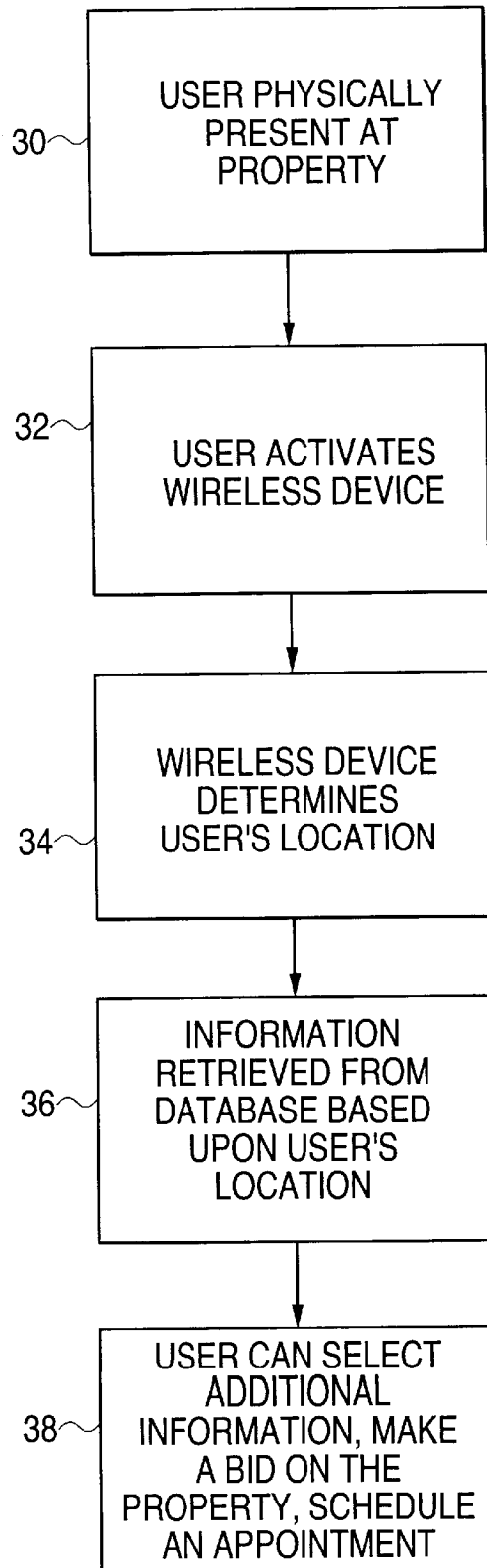


FIG. 2



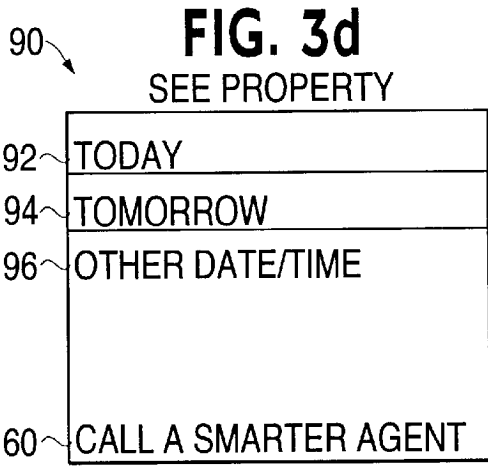
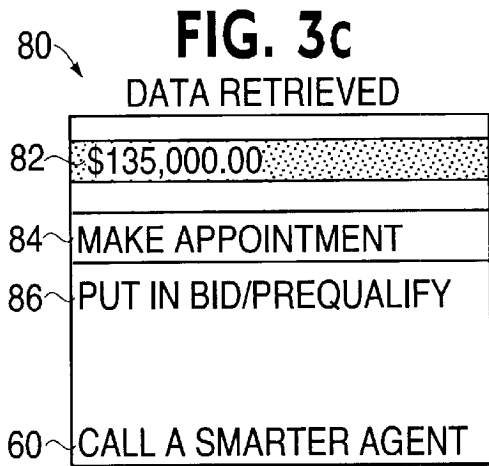
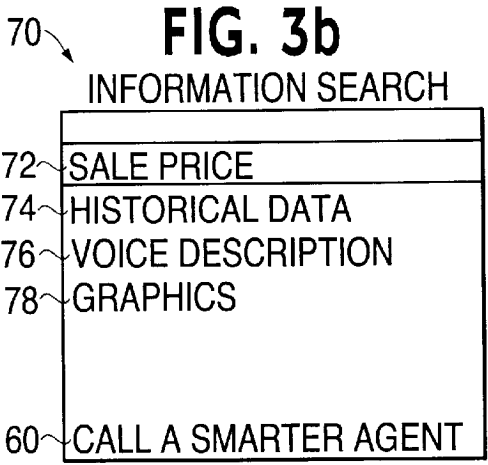
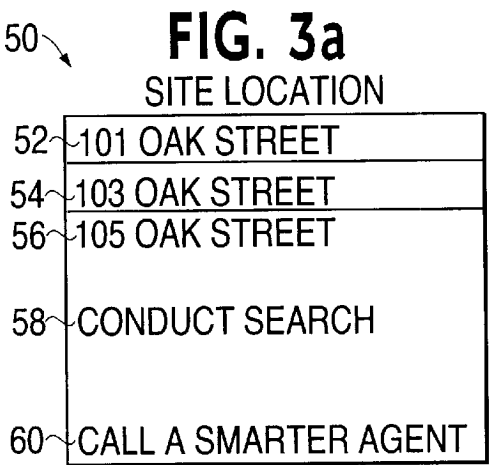


FIG. 4a
SEARCH

100

102 { 101 OAK STREET
103 OAK STREET
105 OAK STREET

104 CONDUCT SEARCH

106 CALL A SMARTER AGENT

FIG. 4b
TYPE

110

SEARCH FOR:

112 SALE

114 RENTAL

106 CALL A SMARTER AGENT

FIG. 4c
GENERAL OR GPS SEARCH

120

SEARCH BY:

122 TOWN

124 ZIP CODE

126 FROM YOUR LOCATION

128 ADDRESS

106 CALL A SMARTER AGENT

FIG. 4d
NARROW SEARCH

130

NUMBER OF MILES:

132 { WITHIN 1
WITHIN 3
WITHIN 5
WITHIN 10

106 CALL A SMARTER AGENT

FIG. 4e
CRITERIA BY PRICE

140

142 { PRICE RANGE
1-150K
150-200K
250-350K
OVER 350K

106 CALL A SMARTER AGENT

FIG. 4f
HOW TO PRESENT OF DATA

150

152 SORT ACCORDING TO:
PROXIMITY TO LOCATION

154 MOST EXPENSIVE

156 LEAST EXPENSIVE

158 SMARTER AGENT RATING

E-MAIL LISTINGS

106 CALL A SMARTER AGENT

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GLOBAL POSITIONING-BASED REAL ESTATE DATABASE ACCESS DEVICE AND METHOD

CLAIM OF PRIORITY

This application desires priority from co-pending Ser. No. 60/186,155 filed Feb. 29, 2000.

FIELD OF THE INVENTION

The present invention relates to a device for accessing a property-centric real estate database, and, more particularly, to a wireless device that uses global positioning data to access the real estate database based upon the property located near the user.

BACKGROUND OF THE INVENTION

The traditional method of buying real estate requires the prospective purchaser to transact through a real estate broker for virtually every aspect of the transaction, from finding a desired property to completing the sale. Often the most difficult part of the process, from the buyer's perspective, is locating a desired piece of real estate. There are generally two methods employed to locate a desired piece of property.

The first relies solely on the real estate broker to use his or her contacts/tools, i.e., mls (multiple listing service) network, to locate property that meets the buyer's specifications. The second is more random, in that if a buyer happens to pass a piece of property that is displaying a "for sale" sign, the buyer can write down the phone number shown on the sign to later inquire about the property, which then places the transaction totally within the broker's hands, as the broker controls all the information relating to the property (e.g., size and cost).

Over the last few years, various computer-related methods for locating real estate have been introduced. For example, U.S. Pat. No. 5,032,989 relates to a computerized map-based real estate search system in which a user can zoom in on a map to greater levels of detail, in order to obtain a more accurate view of the location of an available piece of property. The mapping system in the '989 patent is centered about a user-selectable landmark, and the different maps that are generated are also centered about the landmark. There is an associated property database which can be accessed remotely either by searching by specified criteria or by using the mapping system. Additionally, U.S. Pat. No. 5,852,810 covers an Internet-based, map-based real estate search system which operates in a similar manner as the '989 patent. The system disclosed in the '810 patent also permits a user to search criteria after narrowing the map-based search down to the city level, thereby allowing a criteria-based search in addition to a location-based search.

When accessing property information via a computer, it is often desirable to view the property at the same time. In this regard, U.S. Pat. No. 5,794,216 recites an interactive multimedia real estate database including interior images and exterior images of a house, the floor plan of the house, and a textual description of the property. Additionally, links are provided on the exterior image of the house that, if clicked, permit the user to view the interior of the corresponding room.

The foregoing patents require a user to be located at a computer, and remote from the property. The technology disclosed in these patents is not very effective when a buyer is driving past a particular piece of property and would like additional information about the property. It would be desir-

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able for a prospective buyer to be able to access information relating to a piece of property as the buyer was present at the property, at any time of day, and whether or not the property displayed a "for sale" sign. This type of information is ideally suited to be transmitted via a wireless device.

U.S. Pat. No. 5,930,699 relates to an address retrieval system based on the position of a cellular telephone. A cell phone user can request information relating to businesses that are located in the proximity of the user, based upon the geographic position of the user as determined by pinpointing the location of the cell phone. Once the location of the user is determined, a database that is keyed on geographic location is searched, looking for businesses of the type requested by the user (e.g., restaurants, gas stations, hotels, etc.) that are located in the area around the user.

U.S. Pat. No. 5,938,721 discloses a mobile computer system having a built-in global positioning system (GPS) locator and an associated database that displays relevant information to the user based upon the user's current location. The database is accessed in real time as the user's position changes and is primarily focused on task-based information. For example, if a stored task is to buy milk, as the user approaches the grocery store, he or she is reminded to buy milk. This patent also discusses route planning between multiple stops, as well as a business-locating function similar to that described in the '699 patent.

SUMMARY OF THE INVENTION

A system for accessing real estate information over a communications network includes a database or multiple databases containing the real estate information, the database being accessible over the communications network; and a wireless device communicating with the communications network and including location determination means for determining the geographic position of the wireless device, whereby the wireless device accesses the database via the communications network based upon the geographic position of the wireless device, the database returning information relating to a property located proximate to the geographic position of the wireless device.

A method for accessing a real estate database over a communications network via a wireless device includes the steps of positioning a user at a desired piece of property; activating the wireless device; determining the geographic position of the user via the wireless device; accessing the database via the communications network based upon the geographic position of the user; and returning information relevant to the property over the communications network to the wireless device.

BRIEF DESCRIPTION OF THE DRAWINGS

For a better understanding of the present invention, reference is made to the following detailed description of an exemplary embodiment considered in conjunction with the accompanying drawings, in which:

FIG. 1 is a network overview of a system for accessing a real estate database constructed in accordance with the present invention;

FIG. 2 is a flowchart of the operation of the system shown in FIG. 1;

FIGS. 3a-3d are screen shots of information retrieval from the database via the wireless device shown in FIG. 1; and

FIGS. 4a-4f are screen shots of a search of the database via the wireless device shown in FIG. 1.

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DETAILED DESCRIPTION OF THE
INVENTION

As shown in FIG. 1, a system 10 for accessing a real estate database includes a real estate database 12 that is connected to a communications network 14. The user may be an individual such as a real estate broker or a consumer. A computer terminal 16 is connected to the network 14 for accessing the database 12. Although only one computer 16 is shown in FIG. 1, the database 12 can be accessed simultaneously by a plurality of computers 16. A wireless device 18 can also connect to the network 14 in order to access the database 12. Preferably, the wireless device 18 is a hand-held electronic device including a global positioning system (GPS) locator which can be location-pinpointed using known means. Among the alternative means which may be used is CDMA cellular positioning technology from Qual Comm. Alternatively, the wireless device 18 can include a cellular telephone capable of receiving and displaying non-voice data and which can be location-pinpointed using known means. The device can also be a network hybrid device. The types of location methods for use in the present invention can comprise EOA, TOA, GPS cell ID and network-assisted GPS systems. The communications network 14 can be any type of communications network, such that the computer 16 and the wireless device 18, whether a hand-held electronic device or a cellular telephone, can both access the database 12. The network 14 is preferably the Internet, thereby permitting any device, wired or wireless, that uses the Internet Protocol standard to be able to access the database 12.

The database 12 is preferably an ODBC-complaint database, such that it is accessible via a variety of database programs. The database 12 includes a variety of different information regarding each property stored therein. In one embodiment, the database 12 includes textual data (e.g., sale price, historical sale data), and in others a recorded or live voice description or voice-activated prompts of a description of the property, such that this information can be retrieved by either the wireless device 18 or the computer 16. Preferably, the database 12 also includes photographs of the property, floor plans of any buildings on the property (in two-dimensional view), and three-dimensional views, animation, or video footage of the property, representing a virtual walk-through of the property. The accessibility of these graphical elements of the database 12 is dependent upon the display capabilities of the receiving device and the wireless network. Ideally, the database 12 is used in connection with a multiple listing service (MLS) to provide information on as large a number of properties as possible.

FIG. 2 is a flowchart showing the operation of the system 10 in connection with the wireless device 18. Beginning at step 30, a user is present at a property in which they are interested. Such a property need not be listed as being for sale; the user merely needs to be physically located at the property. The user then activates the wireless device 18 in step 32, and in step 34, the wireless device 18 determines the user's geographic position through known methods. Based upon the geographic position of the user, the wireless device 18 accesses the database 12 in step 36 and retrieves information relating to the property where the user is located at the time the database 12 is accessed. Note, that this process can also be used in reverse using a set of criteria to search for property, and with GPS activated directions to matching properties from the user's location. In step 38, the user can access additional information relating to the property, make a bid on the property, schedule an appointment to view the

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property, or search for additional properties, all through the wireless device 18. It is to be noted and stressed that the present invention may be used in conjunction with a wireless operating system such as the WAP internet protocol.

If the user is accessing the database 12 via the computer terminal 16 instead of the wireless device 18, the user will not be present at the property and can search the database 12 to locate a desired property. Preferably, a user of the computer terminal 16 will access the database 12 over the network 14 via a World Wide Web browser, such as Netscape Navigator® or Microsoft Internet Explorer™. The information in the database 12 can be transmitted to the computer terminal 16 in any browser-compatible format, such as HTML; software programs for transmitting and formatting the information are known in the art. This information can also be downloaded at the Internet site and forwarded to the wireless device to promote continuity of property search, study, e-mail alerts, and transaction capabilities.

When the user of the wireless device 18 is present at a desired property, he or she can retrieve information about the property, through screens like those shown in FIGS. 3a-3d. The first screen the user sees is a location screen 50, which contains a plurality of street addresses 52-56. Due to the imprecise nature of commercial GPS systems, the exact location of the user may be incorrect by several feet, and therefore, in order to compensate for the imprecision, the location screen 50 displays several possible addresses in the vicinity of the user (however, the list is not limited to three items as shown in FIG. 3a). Of the GPS location determination is sufficiently accurate to pinpoint a specific property, it is highlighted as shown at 54. If the highlighted property is not the one the user is interested in, the user can select one of the other listed properties 52, 56. The conduct search option 58 will be discussed below in connection with FIGS. 4a-4f. If the user would like to receive assistance at any time during the information retrieval process, the user can select to call an agent item 60, and the user will be connected to a call center or Realtor-connected office to receive additional instruction or information. The call agent item 60 is accessible from any of the information retrieval screens.

After the user selects the desired property (shown at 54 in FIG. 3a), an information selection screen 70 as shown in FIG. 3b is displayed. The information screen 70 contains a menu with selections such as sale price 72, historical data 74, voice description 76, and graphics 78. The list can be expanded beyond these four options, such as for analysis, valuation, financing or other tools relating to the real estate transaction. Selecting the sale price item 72 will show the user the current sale price for the property, as will be discussed below. Choosing the historical data item 74 will show the user the historical sale prices for the property, in order to assess the property's appreciation over time. Electing the voice description option 76 will play back a spoken description of the property or live help. Lastly, selecting the graphics item 78 will display any available graphics (e.g., floor plans, exterior or interior views, or walkthroughs) relating to the property.

If the user selects the sale price item 72, a retrieved data screen 80 will be displayed and is shown in FIG. 3c. The retrieved data screen includes the sale price 82, an option to make an appointment 84 to view the property, and the ability to place a bid 86 on the property. Assuming the user selects the make appointment item 84, the user will see an appointment scheduling screen 90 as shown in FIG. 3d. From the scheduling screen 90, the user can choose from pre-selected appointment times such as today 92, tomorrow 94, or

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schedule a different appointment time 96. If the user selects the bid item 86, the user will be prompted to enter a bid amount, which will be transmitted back to the database 12.

FIGS. 4a-4f show the screen shots on the wireless device 28 when the user desires to search for a particular piece of property. Referring to FIG. 4a, which is shown after the user's location has been determined via GPS, a search screen 100 is shown and includes a list 102 of street addresses of nearby properties and a conduct search item 104. If the user would like to receive assistance at any time during the search process, the user can select the call an agent item 106, and the user will be connected to a call center or Realtor-connected office to receive additional instruction or information. The call agent item 106 is accessible from any of the search screens.

The user enters the search process after selecting the conduct search item 104, and is shown a property type screen 110 (FIG. 4b). The remainder of the discussion regarding the search function relates to a user searching for a residential property. The search function is also applicable to a search for commercial property; the main differences being some of the options available in the screen shots shown in FIGS. 4b and 4e. As shown in FIG. 4b, the property type screen includes options for sale property 112 and rental property 114. After selecting the property type, the user is shown a search type screen 120 as illustrated in FIG. 4c. The search type screen 120 displays a menu of search options, including search by town 122, search by zip code 124, search by present location 126, and search by street address 128.

Assuming that the user chooses the search by present location item 126, a narrow search screen 130 (FIG. 4d) is displayed, from which the user can narrow the geographic scope of the search by selecting a predefined radius 132. Next, the user selects the price range for the property from a price search screen 140, as shown in FIG. 4e. The price search screen 140 presents a list 142 of price ranges; the list 142 shown in FIG. 4e is an arbitrary breakdown by price, and can be refined to include additional price categories. If the user selects one of the other search types 122, 124, 128, the user will be prompted to enter the information necessary to complete the search. The entered information will then be transmitted back to the database 12.

FIG. 4f shows a sort screen 150 which permits the user to select the order in which he or she wishes to review the search results. The same sort screen 150 is shown regardless of the search type 122-128 selected by the user. The results can be sorted by proximity to the user's present location 152, in descending order starting with the most expensive property 154, in ascending order beginning with the least expensive property 156, and by property rating 158. The property rating 158 is a proprietary rating determined on the basis of the condition of the property, the location of the property, and the list price of the property.

It will be understood that the embodiment described herein is merely exemplary and that a person skilled in the art may make many variations and modifications without departing from the spirit and scope of the present invention. All such variations and modifications are intended to be included within the scope of the invention as defined in the appended claims.

What is claimed is:

1. A system for accessing real estate information over a communications network, comprising:
a database containing real estate information and property location information related to a geographic position,

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- said database being accessible over the communications network; and
- a wireless device communicating with said database over the communications network and including location determination means for determining the geographic position of said wireless device, whereby said database accesses said property location information via the communications network based upon the geographic position provided by said wireless device, said database returning said real estate information to said wireless device, said returned real estate information relating to a property located proximate to the geographic position of said wireless device.
2. A method for accessing a real estate database over a communications network via a wireless device, comprising:
positioning a user at a desired piece of property;
activating the wireless device;
determining a geographic position of the user via the wireless device;
accessing the real estate database via the communications network based upon the geographic position of the user; and
returning information relevant to the desired piece of property over the communications network to the wireless device.
3. The method of claim 2, wherein said returning information relevant to the desired piece of property includes returning real estate information.
4. The method of claim 2, further comprising:
querying the user for input based on said returned information;
receiving input from the user based on querying the user; and
providing additional real estate information regarding the property based upon the input received.
5. A real estate information system, comprising:
a database including information about a plurality of properties, said information including real estate information and property location information, said database being accessible over a communications network, said database being accessible by a wireless device configured to communicate with the communications network and including a location determining device configured to determine a geographic position of the wireless device, said database communicating at least a portion of said real estate information to said wireless device, said communicated portion of said real estate information relating to a property located proximate to the determined geographic position.
6. The real estate information system of claim 5, wherein said database contains real estate information and property location information related to a plurality of geographic positions.
7. A method of retrieving real estate information, comprising:
providing over a communications network a geographic position of a wireless device to a real estate information system, said information system including information about a property, said information including real estate information and property location information; and
receiving said location information and said real estate information from said real estate information system, said real estate information related to a property proximate to the geographic position.
8. The method of claim 7, wherein said receiving real estate information includes receiving information describing

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at least one of sale price, realtor, floor plan, physical description, or owner contact information.

9. The method of claim 7, wherein said providing information related to a geographic position includes:

providing geographic position information from the Global Positioning System. 5

10. The method of claim 7, wherein said providing information related to a geographic position includes:

providing geographic position information over at least a portion of a wireless network. 10

11. The method of claim 7, wherein said providing information related to a geographic position includes:

providing geographic position information, said geographic position information being determined by the wireless device. 15

12. The method of claim 7, wherein said providing information related to a geographic position includes:

providing geographic position information, said geographic position information first being received by the wireless device. 20

13. A method of providing real estate information from a real estate information system to a wireless device, the method comprising:

receiving geographic position information from the wireless device that identifies a geographic position of the wireless device; 25

accessing a database including location information and real estate information related to a property using the geographic position information; and 30

transmitting to the wireless device said real estate information related to a property proximate to said geographic position.

14. A wireless device for obtaining real estate information, comprising: 35

a transmitter operable with a position determining system that provides geographic position information includ-

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ing a geographic position of the wireless device to an information system, the information system including information about a property, said information including real estate information and property location information;

a receiver that receives said real estate information based on said geographic position from said information system.

15. The wireless device of claim 14, further comprising: a display configured to display said real estate information received from said information system.

16. The wireless device of claim 14, further comprising: an audio device configured to output said real estate information from said information system.

17. A method of accessing a database including information about properties with a wireless device, said information including real estate information and property location information, the method comprising:

determining the geographic position of the wireless device;

retrieving real estate information for one of the properties in the database using the geographic position of the wireless device to access the information about the properties via the property location information.

18. Computer executable software code stored on a computer readable medium operable with a wireless device, the code for:

providing a geographic position associated with the wireless device to a real estate information system having real estate information and location information; and

receiving said real estate information from said real estate information system, said real estate information related to a property proximate to the geographic position, said real estate information retrieved by said real estate information system using said location information.

* * * * *

EXHIBIT “B”

US006496776B1

(12) **United States Patent**
Blumberg et al.

(10) **Patent No.:** **US 6,496,776 B1**
(45) **Date of Patent:** **Dec. 17, 2002**

(54) **POSITION-BASED INFORMATION ACCESS
DEVICE AND METHOD**

5,938,721 A 8/1999 Dussell et al.
5,944,769 A 8/1999 Musk et al.

(76) Inventors: **Brad W. Blumberg**, 9 Signal Hill Dr.,
Vorhees, NJ (US) 08043; **Eric M.
Blumberg**, 5 Island Ave., Island Ter.,
Apt. 8J, Miami, FL (US) 33139

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patent is extended or adjusted under 35
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(21) Appl. No.: **09/774,120**

(22) Filed: **Jan. 31, 2001**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/639,265, filed on
Aug. 15, 2000.

(60) Provisional application No. 60/186,155, filed on Feb. 29,
2000.

(51) **Int. Cl.⁷** **G01C 21/00**

(52) **U.S. Cl.** **701/213; 701/214; 340/988;
342/357.09**

(58) **Field of Search** 701/213, 214,
701/211; 340/988; 342/357.08, 357.09,
357.1

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,032,989 A 7/1991 Tornetta
5,594,425 A 1/1997 Ladner et al.
5,684,859 A * 11/1997 Chanroo et al. 379/58
5,794,216 A 8/1998 Brown
5,852,810 A 12/1998 Sotiroff et al.
5,901,214 A 5/1999 Shaffer et al.
5,930,699 A 7/1999 Bhatia

OTHER PUBLICATIONS

“SnapTrack Awarded Patent For Locating or Tracking Wire-
less Devices Via Internet and Client-Server-Based Com-
puter Networks”, <http://famulus.msnbc.com/famuluscom/businesswire01-23-050325.asp?sym=QCOM>, Jan. 23,
2001.

“Lucent Technologies and Profilium Inc. Announce Alliance
Agreement to Deploy Advanced Location-Based Mobile
Advertising Solution”, <http://www.hoovershbn.hoovers.com/bin/story?StoryId=CoM0p0bKbytiXmdi&FQ=c...%20L>.

“The Meaning of Telematics”, <http://www.globaltelematics.com/telematics.htm> Oct. 20, 2000.

HomeFinder—Find the Home That’s Right for You from
<http://www.homefinder.com>, no date.

Printout from <http://www.homescape.com/buying/>, no date.

zipRealty.com: The zipRealty.com Buyer’s Advantage
from http://www.ziprealty.com/buy_a_home/advantage-jsp, no date.

(List continued on next page.)

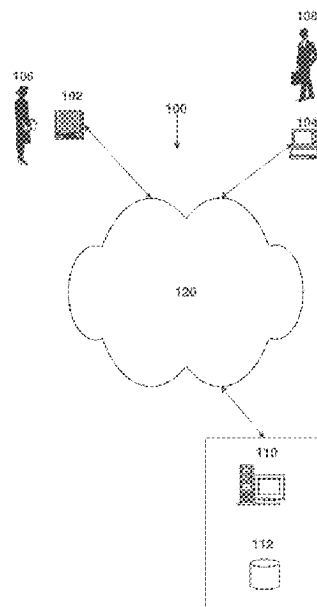
Primary Examiner—Yonel Beaulieu

(74) *Attorney, Agent, or Firm*—Cooley Godward, LLP

(57) **ABSTRACT**

A system and method retrieve location-centric information.
The method includes providing geographic position infor-
mation of a wireless device to an information system or
database and receiving location identifiers based on the
geographic position. Each location identifier has related
location-centric information that can be viewed by the user
of the wireless device.

28 Claims, 6 Drawing Sheets



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OTHER PUBLICATIONS

Homes for Sale—MSN HomeAdvisor from <http://homeadvisor.msn.com/homes/overview.asp>, no date.

REALTOR.com: Real Estate—Find a new home and a realtor from <http://www.realtor.com/FindHome/default.asp>, no date.

REALTOR.com: Real Estate—Homes for Sale in New Jersey from <http://www.realtor.com/newjersey/nbselnj.asp>, no date.

REALTOR.com: Real Estate—Homes for Sale in Atlantic City from <http://www.realtor.com/atlanticcity/nbregion4.asp>, no date.

REALTOR.com: Find a Home—Select Property Type from <http://www.realtor.com/PropType.asp?pgnum=1&st=nj&frm=bycomm&mls=atlanticcity&mlsttl=Atlantic=City&comm>, no date.

REALTOR.com: Real Estate in Bay Area from <http://www.realtor.com/selectnb.asp?frm=bycomm&st=nj&mls=atlanticcity&mlsttl=Atlantic=City&comm=Bay=Area&>, no date.

REALTOR.com: Real Estate—Find a Neighborhood from <http://www.realtor.com/FindNeig/default.asp>, no date.

* cited by examiner

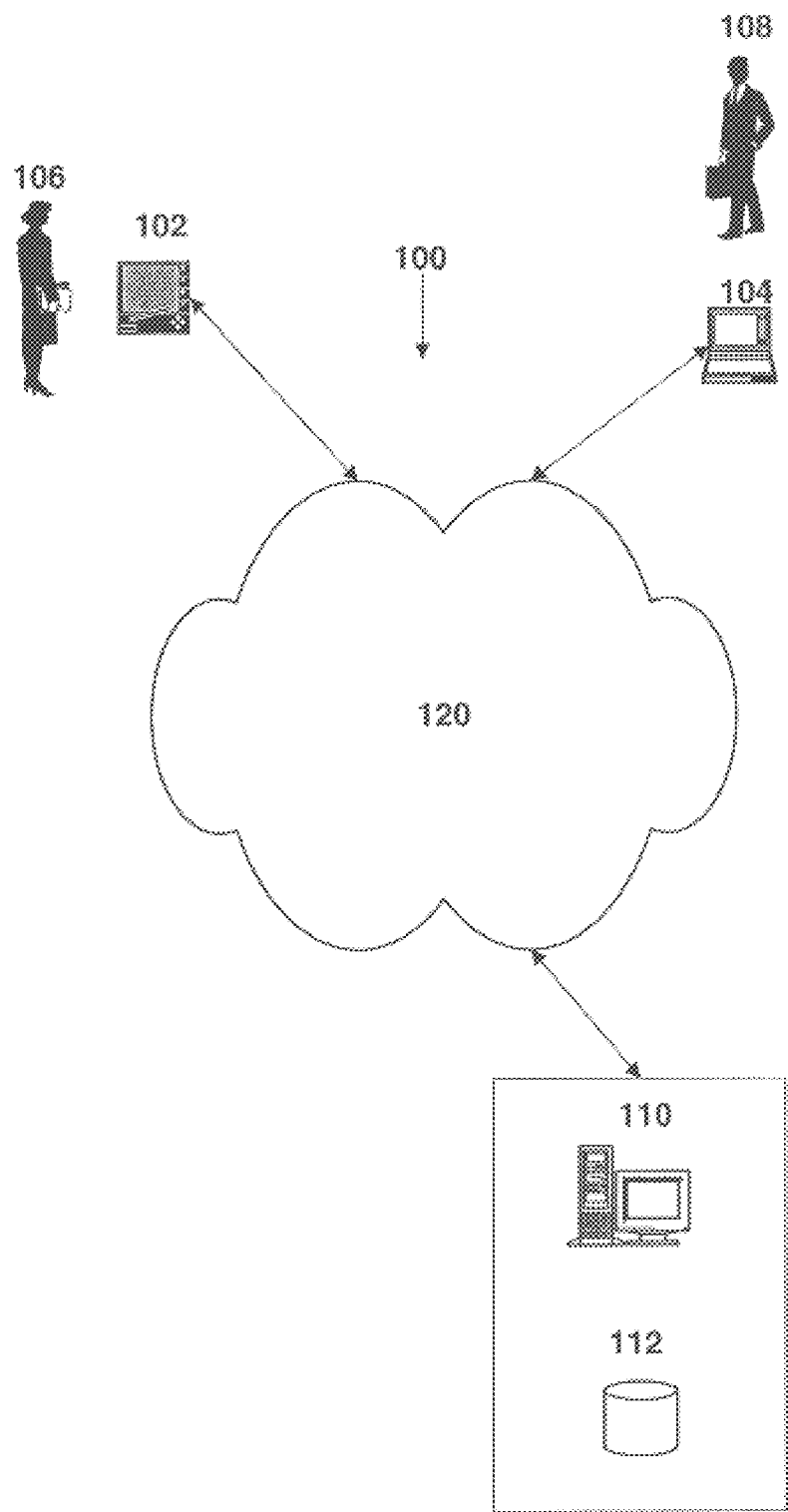


Figure 1

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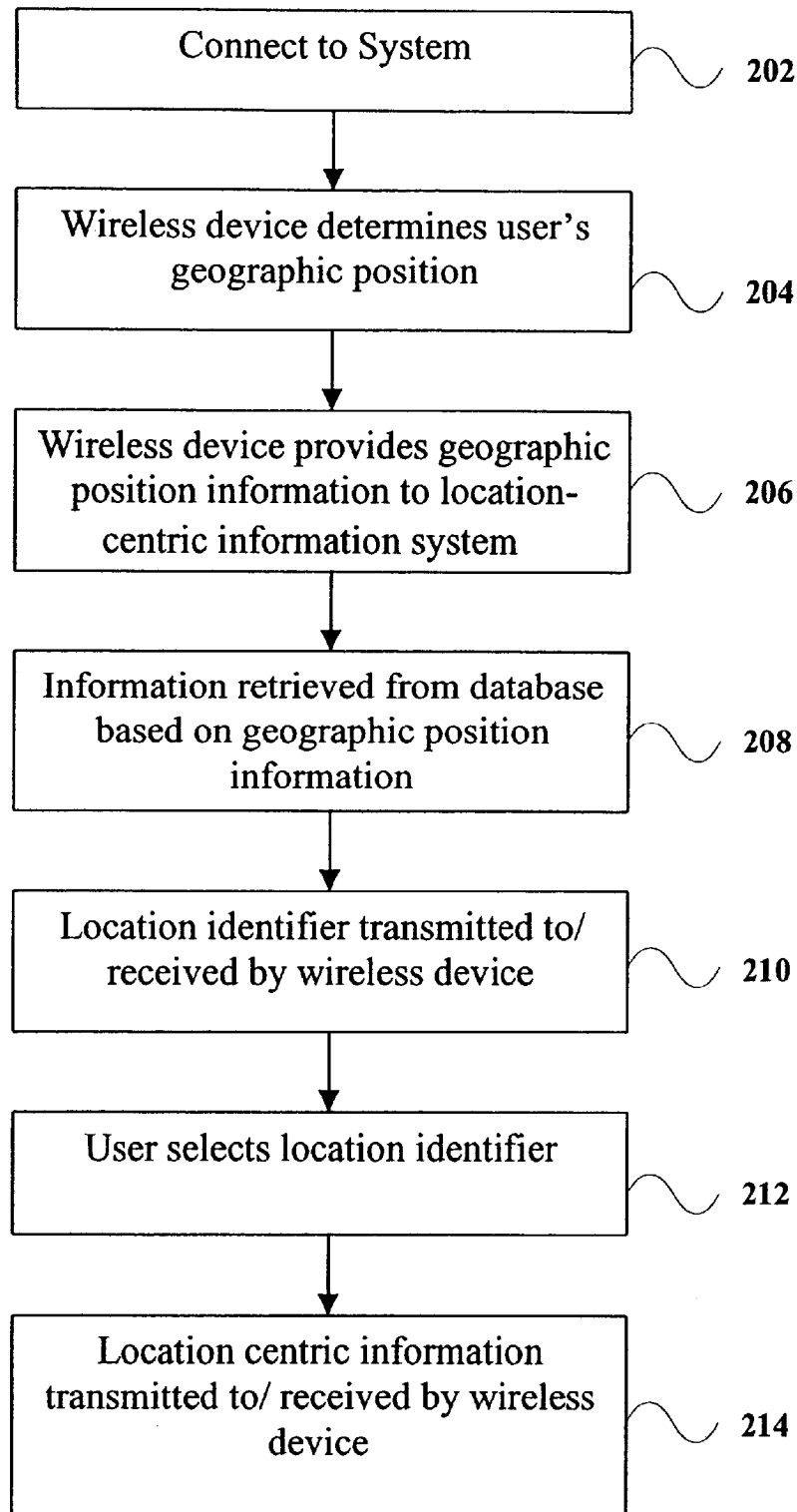


Figure 2

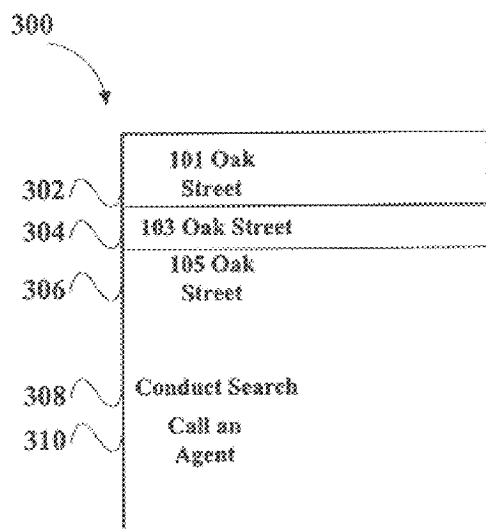


Figure 3

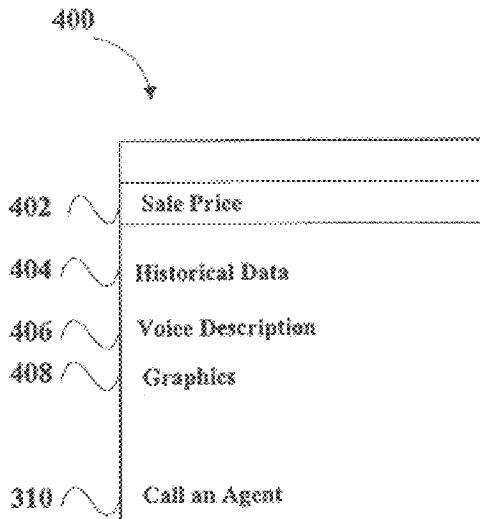


Figure 4

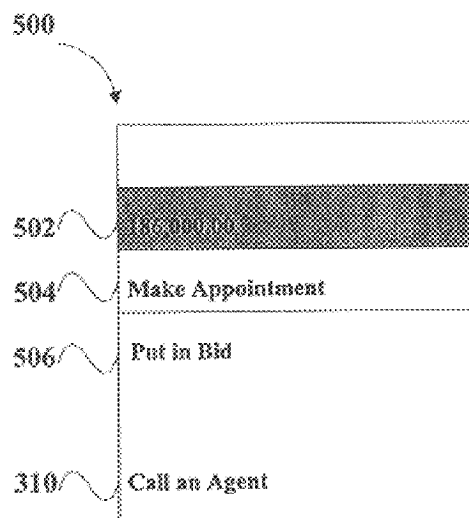


Figure 5

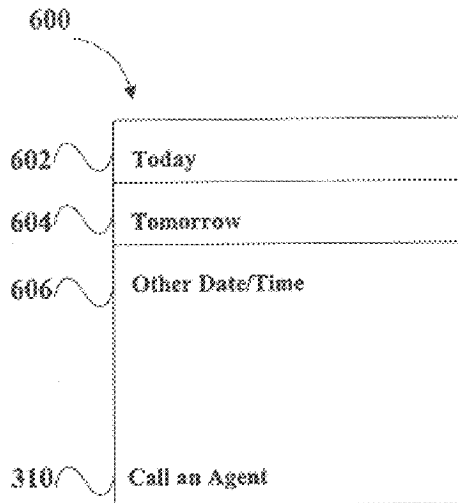


Figure 6

700

| | |
|-----|--|
| 702 | 101 Oak Street 103 Oak Street 105 Oak Street |
| 704 | Conduct Search |
| 310 | Call an Agent |

Figure 7

800

| | |
|-----|---------------|
| | Search For: |
| 802 | Sale |
| 804 | Rental |
| 310 | Call an Agent |

Figure 8

900

| | |
|-----|--------------------|
| 902 | Search By: |
| 904 | Town |
| 904 | Zip Code |
| 906 | From Your Location |
| 908 | Address |
| 310 | Call an Agent |

Figure 9

1000

| | |
|------|------------------|
| | Number of Miles: |
| 1002 | Within 1 |
| 1002 | Within 3 |
| 1002 | Within 5 |
| 1002 | Within 10 |
| 310 | Call an Agent |

Figure 10

1100

| | |
|------|---------------|
| | Price Range |
| 1102 | 1-150K |
| 1102 | 150K-200K |
| 1102 | 250K-350K |
| 1102 | Over 350K |
| 310 | Call an Agent |

Figure 11

1200

| | |
|------|-----------------------|
| | Sort According To: |
| 1202 | Proximity to Location |
| 1204 | Most Expensive |
| 1206 | Least Expensive |
| 1208 | Agent Rating |
| 310 | Call an Agent |

Figure 12

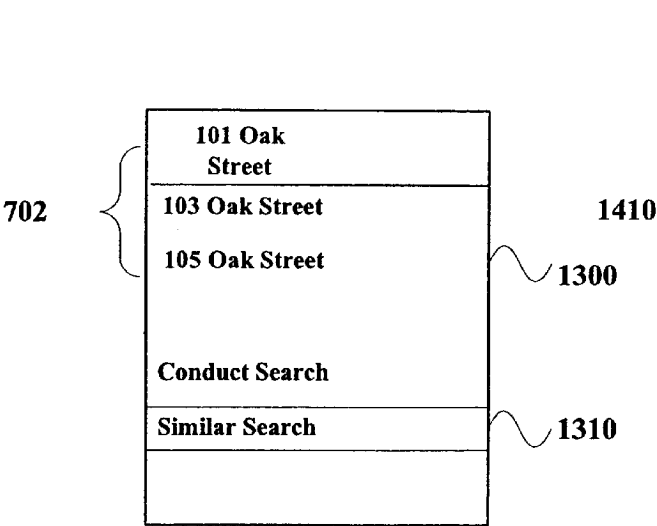


Figure 13

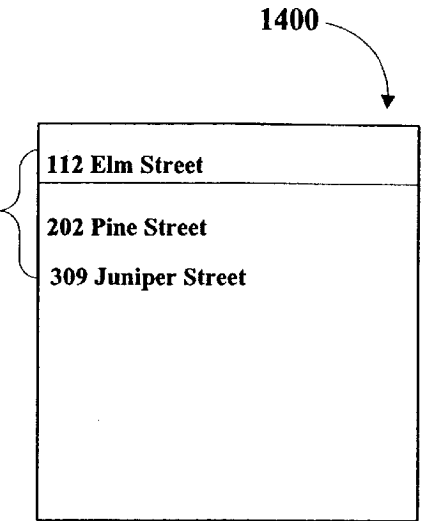


Figure 14

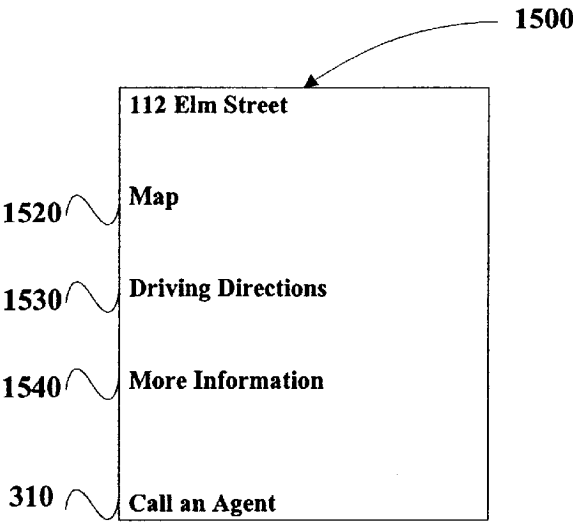


Figure 15

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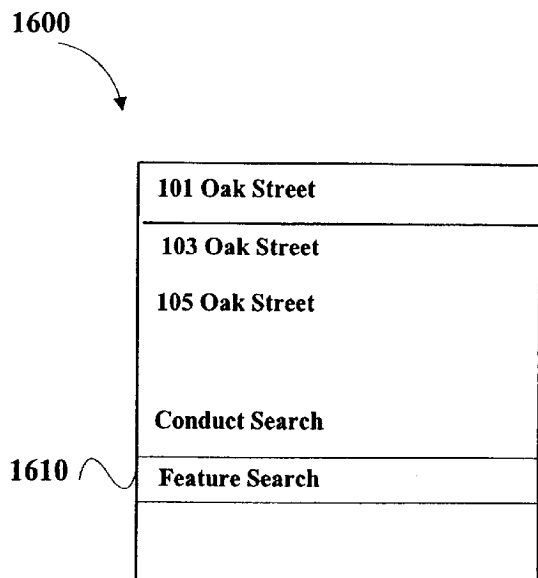


Figure 16

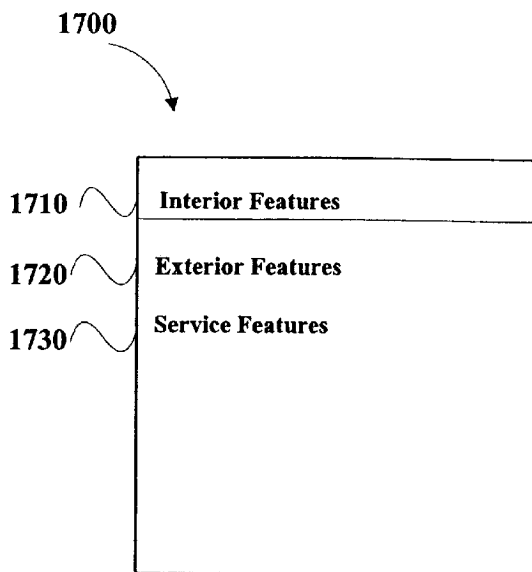


Figure 17

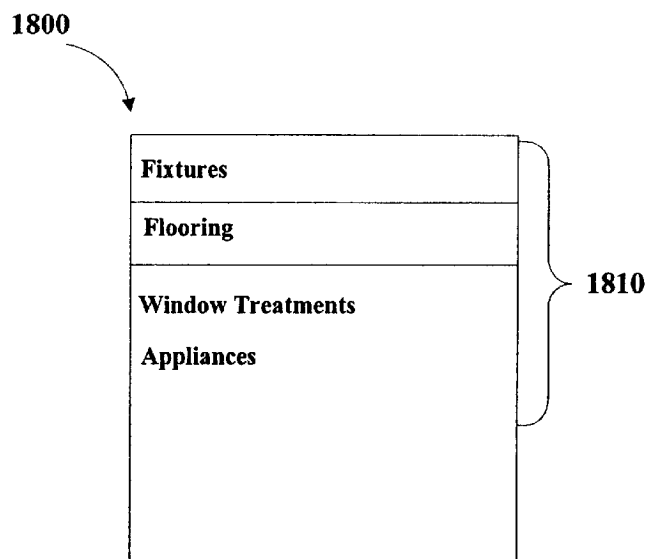


Figure 18

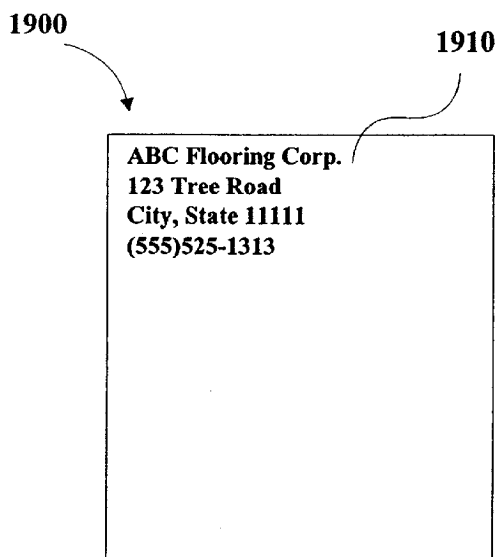


Figure 19

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**POSITION-BASED INFORMATION ACCESS
DEVICE AND METHOD****CROSS-REFERENCE TO RELATED
APPLICATIONS**

This application claims priority under 35 U.S.C. 120 to U.S. application Ser. No. 09/639,265, filed Aug. 15, 2000 and entitled "Global Positioning-Based Real Estate Database Access Device and Method," incorporated herein by reference, which claims priority under 35 U.S.C. 119(e) to U.S. application Ser. No. 60/186,155, filed Feb. 29, 2000, entitled "Global Positioning-Based Real Estate Database access Device and Method," incorporated herein by reference. This application is related to concurrently filed U.S. Patent Application entitled "Position-Based Information Access Device and Method of Searching Same," U.S. application Ser. No. 09/774,119 incorporated herein by reference, which is a CIP of Appl. Ser. No. 09/639,265

BACKGROUND OF THE INVENTION**1. Field of the Invention**

The present invention relates to a method and apparatus for accessing and managing property-centric information, and, more particularly to a wireless device that uses positioning data to access such information.

2. Description of the Related Art

People often desire to obtain information about a particular location at which they are located, whether it be a famous or historic landmark, an office building, a business location, a piece of real estate, an airport, a hotel, shopping mall, or a sports arena. The traditional methods of obtaining such information include using printed materials such as guide books, maps, etc., communicating with people knowledgeable about the particular location, and researching the particular location either before or after being physically present at the location.

Such methods of obtaining information may significantly detract from the person's ability to appreciate or experience the location at which they are present. Put more simply, the person may not be able to gather or access enough information about the location because it is not readily available. For example, if a person is visiting a famous landmark at a time when there are no tour guides available and the local gift shop is closed, the person may not be able to obtain valuable information about the landmark. Although the person may be able to get the information later, that isn't always a suitable alternative. Even in the event where a person is able to obtain printed materials, they are often cumbersome to carry around and read through while traveling from place to place. Moreover, as a person visits numerous locations, they tend to accumulate vast amounts of printed materials.

Another example in which location-specific information is not readily obtained is during a real estate search. The traditional method of buying real estate requires the prospective purchaser to transact through a real estate broker for virtually every aspect of the transaction, from finding a desired property to completing the sale. Often the most difficult part of the process, from the buyer's perspective, is locating a desired piece of real estate. There are generally two methods employed to locate a desired piece of property.

The first method relies solely on the real estate broker to use his or her contacts, including listing services, to locate property that meets the buyer's specifications. The second is more random, in that if a buyer happens to pass a piece of

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property that is displaying a "for sale" sign, the buyer can write down the phone number shown on the sign to later inquire about the property, which then places the transaction totally within the broker's hands, as the broker controls all the information relating to the property (e.g., size and cost).

People also have a difficult time finding exactly the right features in their house search or have trouble adding exactly the right features to their existing homes. People generally have difficulty finding exactly the right manufacturer or service provider to provide particular features for their home or office. Moreover, it is difficult to find an architect to design a home of the style that a person desires, or to find a landscaper or gardener to achieve a look that a person wants, etc. Most often, people will look in the phone book to get a list of service providers or manufacturers and then end up driving all over town to review samples of various service providers' work.

Over the last few years, various computer-related methods for locating real estate have been introduced. For example, U.S. Pat. No. 5,032,989 relates to a computerized map-based real estate search system in which a user can zoom in on a map to greater levels of detail, in order to obtain a more accurate view of the location of an available piece of property. The mapping system in the '989 patent is centered about a user-selectable landmark, and the different maps that are generated are also centered about the landmark. There is an associated property database that can be accessed remotely either by searching by specified criteria or by using the mapping system. Additionally, U.S. Pat. No. 5,852,810 covers an Internet map-based real estate search system that operates in a similar manner to the '989 patent. The system disclosed in the '810 patent also permits a user to search criteria after narrowing the map-based search down to the city level, thereby allowing a criteria-based search in addition to a location-based search.

When accessing property information via a computer, it is often desirable to view an image of the property at the same time. In this regard, U.S. Pat. No. 5,794,216 is directed to an interactive multimedia real estate database including interior images and exterior images of the selected house, the floor plan of the house, a textual description of the property, etc. Additionally, links are provided on the exterior image of the house that, if clicked, permit the user to view the interior of the corresponding room.

The foregoing patents require a user to be located at a computer, and remote from the property. The technology disclosed in these patents is not effective when a buyer is driving past a particular piece of property and would like additional information about that property. It would be desirable for a prospective buyer to be able to access information relating to a piece of property as the buyer was present at the property, at any time of day, and whether or not the property displayed a "for sale" sign. This type of information is ideally suited to be transmitted via a wireless device.

U.S. Pat. No. 5,930,699 relates to an address retrieval system based on the position of a cellular telephone. A cell phone user can request information relating to businesses that are located in the proximity of the user, based upon the geographic position of the user as determined by pinpointing the location of the cell phone. Once the location of the user is determined, a database that is keyed on geographic location is searched, looking for businesses of the type requested by the user (e.g., restaurants, gas stations, hotels, etc.) that are located in the area around the user.

U.S. Pat. No. 5,938,721 discloses a mobile computer system having a built-in global positioning system (GPS)

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locator and an associated database that displays relevant information to the user based upon the user's current location. The database is accessed in real time as the user's position changes and is primarily focused on task-based information. For example, if a stored task is to buy milk, as the user approaches the grocery store, he or she is reminded to buy milk. This patent also discusses route planning between multiple stops, as well as a business-locating function similar to that described in the '699 patent.

It will thus be appreciated that it is difficult for a person to obtain information related to a specific location without the person knowing their actual location. It is further difficult for a person to locate information about service providers that contributed to the construction or maintenance of a particular location.

SUMMARY

In an effort to address the aforementioned problems, the embodiments of the present invention strive to provide an apparatus and methods whereby an individual is able to readily obtain location-centric information about a specific physical location via a wireless device.

Other objects, advantages and features associated with the embodiments of the present invention will become more readily apparent to those skilled in the art from the following detailed description. As will be realized, the invention is capable of other and different embodiments and its several details are capable of modification in various aspects, all without departing from the invention. Accordingly, the drawings and the description are to be regarded as illustrative in nature, and not limitative.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic of an information retrieval system in accordance with one embodiment of the present invention.

FIG. 2 is a flow diagram illustrating one embodiment of a method according to the present invention.

FIG. 3 is an example of a location identifier display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 4 is an example of an information search display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 5 is an example of a data retrieval display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 6 is an example of an appointment display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 7 is an example of a search initiation display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 8 is an example of a search selection display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 9 is an example of a criteria selection display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 10 is an example of a transaction type display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 11 is an example of a narrow search display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 12 is an example of a data presentation display produced on a wireless device of the system illustrated in FIG. 1.

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FIG. 13 is an example of a similar search display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 14 is an example of a similar search results display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 15 is an example of a similar search address display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 16 is an example of a feature search display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 17 is an example of a feature selection display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 18 is an example of a narrow feature selection display produced on a wireless device of the system illustrated in FIG. 1.

FIG. 19 is an example of a feature detail display produced on a wireless device of the system illustrated in FIG. 1.

DETAILED DESCRIPTION

FIG. 1 illustrates one embodiment of an information retrieval system **100** suitable for implementing the features of the present invention, and FIG. 2 illustrates a flow chart of an exemplary method of the present invention. System **100** includes one or more wireless devices **102** and may also include a computer **104** and a location-centric information system **110** that includes an information database **112**. Users **106, 108** may retrieve position-based location-centric information from location-centric information system **110** over a network **120** for use with devices **102, 104**.

In one embodiment, wireless device **102** is a hand-held electronic device including a global positioning system (GPS) locator whose location can be pinpointed using known means. In another embodiment, CDMA cellular positioning technology, such as that available from QUALCOMM may be incorporated in device **102**. In a further embodiment, wireless device **102** may include a cellular telephone capable of receiving and displaying non-voice data and whose location can be pinpointed using known means. Device **102** may also be a network hybrid device. The types of location methods for use in the present invention may comprise EOA, Time Difference of Arrival (TDOA), Time of Arrival (TOA), GPS cell ID, and network-assisted GPS systems as well as others. While geographic position information may be provided to location-centric information system **110** from wireless device **102**, it is also possible for location-centric information system **110** to independently determine the position of wireless device **102**. Wireless device **102** may include an automobile-based device that incorporates the telematics principles.

Wireless device **102** and computer **104** are each operable by a user **106, 108** and each include a user input/output, a display, and a memory. Wireless device **102**, and computer **104** are each configured to run software to retrieve and view location-centric information from database **112** of location-centric information system **110** over network **120**. As described below, a user interface rendered on wireless device **102** and computer **104** also enables users **106, 108** to carry out various activities, including, for example, information retrieval, appointment scheduling, data searches, etc. Hence, wireless device **102** and computer **104** are devices by which each user **106, 108** can download and/or view information related to a landmark at which they are located and retrieve and view the information regarding the particular landmark.

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For purposes of the present application, the term landmark may be used to refer to any (1) physical structure such as a residence, apartment, apartment building, detached home, partially detached home, townhouse, condominium, co-op, building, etc.; (2) natural feature such as a body of water, glacier, canyon, cave, mountain, mountain range, etc.; (3) historical feature such as a monument, memorial, statue, battle field, historic location, park, trail, etc.; or (4) commercial feature such as a stadium, arena, school, shopping mall, strip mall, store, grocery store, parking garage, airport, hotel, inn, hostel, camp ground, car dealer, car rental establishment, hospital, etc.

Suitable implementations of wireless devices **102** and computer **104** include devices such as laptop computers, wireless telephones, portable workstations, personal data assistants ("PDA's"), pagers, and various other portable electronic communication devices capable of carrying out similar activities. Where wireless device **102** is a PDA or similar device, user **106** may utilize conventional methods to provide input. Where wireless device **102** is an automobile-based device, user **106** may utilize manual methods or voice commands to provide input to wireless device **102**. In such a situation, wireless device **102** is equipped with voice-recognition software known in the art.

Network **120** may be any form of interconnecting network including an intranet, such as a local or wide area network, or an extranet, such as the World Wide Web or the Internet. Network **120** can be physically implemented on a wireless or wired network, on leased or dedicated lines, including a virtual private network (VPN). Communications network **120** can be any type of communications network, such that computer **104** and wireless device **102**, whether a hand-held electronic device or a cellular telephone, can both access location-centric information system **110** to retrieve and view information from database **112**. The present invention may be used in conjunction with a wireless operating system such as the Wireless Application Protocol (WAP).

In one embodiment, system **100** is a WINDOWS based system. In another embodiment, system **100** is a PALM based system. In yet a further embodiment, system **100** is a UNIX based system. System **100** may also be internet-based and generate web-browser and web page data, such as HTML, JavaScript, Java applets, etc.

While the present invention may be used in conjunction with any of the categories of landmarks described above, it may be used in a real estate context. Many of the examples illustrated herein relate to use of the present invention with respect to real estate. However, the present invention is applicable to any of the landmarks described above.

Database **112** may be an ODBC-compliant database, such that it is accessible via a variety of database programs. Database **112** may include a variety of different location-centric information regarding each landmark stored therein. Database **112** may also include textual data and a voice description of a landmark at a particular location, such that this information can be retrieved by either wireless device **102** or computer **104**. Database **112** may also include photographs of the property, floor plans of any buildings on the property (in two-dimensional and three-dimensional views), animation, or video footage of the property, representing a virtual walk-through of the property. The accessibility of these graphical elements of database **112** may be dependent upon the display capabilities of the receiving device. In one embodiment of the present invention, database **112** may be used in connection with a multiple listing service (MLS) to provide information on as large a number of properties as possible.

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Accordingly, although location-centric information system **110** may store information related to real estate, it may store other information as well. The information may be stored in a single database **112** or multiple databases. For example, location-centric information system **110** may store any combination of information regarding any of the following in any number of databases **112**. Location-centric information system **110** may include information regarding single family homes, condominiums, town houses, apartments, historic buildings, monuments, memorials, parks, statues, bodies of water, mountain ranges, canyons, trails, etc. The location-centric information system **110** may further include information regarding office buildings, including directories, occupants/tenants, floor plans, lease data/availability, specifications, services offered in the building, etc. Location-centric information system **110** may further include information regarding business locations such as retail outlets, and restaurants, including information about services offered, menus, prices, etc. Location-centric information system **110** may also include information regarding airports, including maps, flight information, parking information, retail information, etc. Location-centric information system **110** may also include information regarding hotels including room availability, rates, historical information, directories, etc. Location-centric information system **110** may include information related to shopping malls including directory information, maps, operating hours, parking information, etc. Location-centric information system **110** may also include information regarding sports arenas such as seating diagrams, concessions available, services offered, etc. Location-centric information system **110** may include any information about any location that may be provided by a representative of the particular location to be included in database **112** or that may be independently entered into database **112** by a party not affiliated with the particular location.

Any one of or combinations of the above-described information stored by database **112** may be communicated to wireless device **102**, and computer **104** over network **120** in the manner described in greater detail below.

The following description of the operation of system **100** includes the function and interaction of user **106** and wireless device **102** with the remainder of system **100** illustrated in FIG. 1. However, it is to be understood that the following description is equally applicable to user **108** and computer **104**, and multiple other users and wireless devices, or portable computers not illustrated in FIG. 1.

One method of the present invention will now be described in reference to FIG. 2. As will be apparent, the operations illustrated in FIG. 2 need not occur in the illustrated order. As illustrated by FIG. 2, at an operation **202**, wireless device **102** may be connected to location-centric information system **110** via network **120** according to known methods. At an operation **204**, user's **106** location (i.e., geographic position, latitude/longitude) is determined using one of the methods described above. At an operation **206**, wireless device **102** provides the geographic position information to location-centric information system **110**.

In an operation **208**, location-centric information system **110** may retrieve location-centric information from database **112** based on the geographic position information provided by wireless device **102**. In one embodiment, location-centric information system **110** also retrieves a location identifier from database **112**. A location identifier is an indicator associated with a particular landmark. The location identifier is representative of a landmark located at the geographic position associated with wireless device **102** and may take

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any of a variety of forms. For example, a location identifier may be a street address of a residential unit (e.g., house, condominium, etc.) at which user **106** is located. Alternatively, the location identifier may be a video image such as a picture or other graphical representation of the landmark at which user **106** is located. Further, the location identifier may be a video or audio representation of the landmark at which user **106** is located. Location-centric information is that information related to the location identifier. The location-centric information is that information described above as being stored in database **112** and may also include information available over network **120** that is related to a location identifier such as detailed residential unit information including house description, sale price, etc.

In an operation **210**, a location identifier is transmitted to, and ultimately received by, wireless device **102**. Alternatively, a plurality of location identifiers may be transmitted to wireless device **102**. FIGS. 3–13 illustrate exemplary displays that may be viewed by user **106** accessing system **100** of the present invention in the search for a particular piece of real estate. As illustrated in FIG. 3, wireless device **102** presents a location identifier display **300** for viewing by user **106**. Location identifier display **300** may be an interactive display viewed by user **106** when user **106** desires to import location-centric information to wireless device **102** from location-centric information system **110**. Hence, wireless device **102** may include computer executable software code stored on a computer readable medium of wireless device **102** for prompting user **106** to select the appropriate location identifier to retrieve the appropriate location-centric information from location-centric information system **110** to wireless device **102**. User **106** can interact with the display using a keyboard, a touch screen, a microphone, etc. In one embodiment, location identifier display **300** presents interactive links **302**, **304**, **306**, **308**, **310** that user **106** may use to import or retrieve the desired location-centric information from location-centric information system **110**, or perform some other function using location-centric information system **110** as will be described. Interactive links **302**, **304**, **306**, **308**, **310** may include a location identifier.

Other interactive links may be provided for various functions such as searching database **112** as will be described below. For example, as illustrated in FIG. 3, location identifier display **300** also includes a conduct search icon **308**, which permits user **106** to perform a search of database **112** and a “Call Agent” icon **310** which allows user **106** to contact a person with greater knowledge of the particular location.

In the embodiment illustrated in FIG. 3, interactive links **302**, **304**, **306** include location identifiers in the form of street addresses. In this embodiment, a plurality of location identifiers **302**, **304**, **306** may be included when the location-centric information system **110** is unable to attribute the geographic position of wireless device **102** with a particular landmark. This may occur, for example, when a geographic position corresponds to several entries in database **112**. In such a case, location-centric information system **110** provides the possible location identifiers corresponding to the several entries within a predetermined or random radius of the geographic position of wireless device **102**. For example, if user **106** is located on a street in front of several houses, location-centric information system **110** may provide location identifiers indicating the street address of the houses in the general vicinity. More specifically, as illustrated in FIG. 3, when user **106** is located, for example, in front of “103 Oak Street” location-centric information system **110** may

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provide location identifiers of “101 Oak Street,” “103 Oak Street,” and “105 Oak Street.” As mentioned above, the location identifiers may also take the form of graphic images of the houses provided wireless device **102** is capable of providing such a display.

In another example, if user **106** is located in the Grand Canyon and desires to retrieve information about the Canyon, the location identifiers that may be provided may relate to the direction user **106** is facing (e.g., North, South, West, East). When user **106** selects the appropriate location identifier, location-centric information may be provided based on the direction user **106** is facing.

Geographic position information of wireless device **102** may be attributed to a distinct landmark within location-centric information system **110**. In that case, location-centric information system **110** may only transmit to wireless device **102** a single location identifier. In such an embodiment, user **106** would then select the single location identifier. In another embodiment, location-centric information system **110** may provide a plurality of location identifiers **302**, **304**, **306**, but may highlight the location identifier that is attributed to the distinct landmark as shown at **304**. In this manner, user **106** may actively choose from alternative location identifiers **302**, **306**. In a further embodiment, where a precise location is provided to location-centric information system **110** from wireless device **102**, location-centric information system **110** may transmit to wireless device **102** only location-centric information relevant to the particular location without user **106** ever actively selecting the location identifier. In such a situation, user **106** may be passively selecting the appropriate location identifier by virtue of user’s **106** position with respect to the particular location.

When presented with a location identifier **302**, **304**, **306**, user **106**, in an operation **212**, user **106** selects the appropriate location identifier. Upon selecting the location identifier, location-centric information system **110** transmits location-centric information related to the selected location identifier to wireless device **102**. In those embodiments where in location identifier is transmitted, location-centric information system **110** transmits location-centric information to wireless device **102** when the distinct landmark is identified.

When wireless device **102** receives the location-centric information in an operation **214**, user **106** is able to manipulate the location-centric information to obtain location-centric information relevant to user **106**. For example, FIG. 4 illustrates an example of a location-centric information search display **400** viewed by user **106** upon receiving location-centric information. Location-centric information search display **400** may include a menu or list of icons with selections **402**, **404**, **406**, **408**, **410** for user **106** to choose from to obtain more narrowly tailored or focused information about the particular place at which they are located. In the illustrated embodiment of a user accessing system **110** for a real estate transaction, such information may include sale price **402**, historical data **404**, voice description **406**, and graphics **408**. The list can be expanded beyond these four options as would be apparent. Selecting sale price item **402** may present to user **106** the current sale price for the property, as will be discussed below. Choosing historical data item **404** may present user **106** with the historical sale prices for the property in order to assess the property’s appreciation over time. Selecting voice description option **406** may play back a spoken description of the property. Finally, selecting graphics item **408** may display any available graphics (e.g., floor plans, exterior or interior views, or walk-throughs) relating to the property.

If user 106 selects one of items 402, 404, 406, 408, 410 from search display 400, a data retrieval display 500 may be displayed, an example of which is illustrated in FIG. 5. Data retrieval display 500 can include more detailed information 502 and action icons 504, 506, 510 which enable user 106 to take action based on detailed information 502 regarding the particular location at which user 106 is located. Referring to the illustrated embodiment, when user 106 selects sale price icon 402, sale price 502, an option to make an appointment 504 to view the property, and the ability to place a bid 506 on the property may be displayed.

Where user 106 chooses an action icon 504, 506, 510, user 106 may be presented with a display 600 that may allow user 106 to take some action with respect to the property at which user 106 is located. In the illustrated embodiment, assuming user selects make appointment item 504, an appointment display 600 is viewed by user 106 as illustrated in FIG. 6. From appointment display 600, user 106 can choose from pre-selected appointment times such as today 602, tomorrow 604, or schedule a different appointment time 606. If user 106 selects bid item 506, user 106 will be prompted to enter a bid amount, which will be transmitted back to database 112. In this manner, user 106 is able to interact with database 112.

FIGS. 7–12 illustrate various exemplary displays on wireless device 102 that may be viewed by user 106 when user 106 desires to search for a particular landmark (i.e., building, property, park, body of water, etc.). FIG. 7 illustrates a search initiation display 700 shown after user's 106 location has been determined using one of the methods described above. Search initiation display 700 may be similar to location identifier display 300 illustrated in FIG. 3 provided location identifier display 300 includes a conduct search icon 308 as illustrated. Search initiation display 700 allows user 106 to search database 112 for more detailed information as will be described. In the illustrated embodiment of user 106 conducting a real estate transaction, search initiation display 700 includes a list 702 of street addresses of properties adjacent to the particular property in which user 106 is concerned, and a conduct search icon 704. If user 106 desires assistance at any time during the search process, user 106 may select call agent item 310, and user 106 will be connected to an operator or recording that may provide additional instruction or information. Such a feature may be available whether user 106 is using wireless device 102 to conduct a real estate transaction or any other type of transaction. Call agent item 310 is accessible from any of the displays described.

User 106 enters the search process after selecting conduct search item 704 from search initiation display 700. A search selection display 800, illustrated in FIG. 8, can then viewed by user 106. Search selection display 800 allows user 106 to choose from broad categories of selection criteria. For example, in the illustrated embodiment, where user 106 is interested in real estate, they may be given the option of searching for properties to either rent or buy. User 106 may be presented with selection icons 802, 804 to prompt the database to narrow the search to a particular category. As illustrated in FIG. 9, user 106 may be presented with a criteria selection display 900 that allows user 106 to further define the search criteria within the chosen category based on the chosen selection icon 802, 804 from search selection display 800. Criteria selection display 900 includes search criteria or search options 902, 904, 906, 908. In the illustrated embodiment, criteria selection display 900 includes a menu of search options, including search by town 902, search by zip code 904, search by present location 906, and search by street address 908.

Upon making a selection from criteria selection display 900, user 106 may then be presented with a transaction type display 1000 that allows user 106 to define the specific criteria chosen from criteria selection display 900 by using a selection list 1002. In the illustrated embodiment, assuming that user 106 chooses search by present location item 906, a transaction type display 1000 is viewed, from which user 106 can narrow the geographic scope of the search by selecting, for example, a predefined radius 1002.

Once user 106 defines the specific search criteria, user 106 may be presented with a narrow search display 1100, to further narrow the search results within the specific criteria by choosing from a selection list 1102 of narrowing criteria. In the illustrated embodiment, user 106 selects, for example, the price range for the property from a list of price ranges 1102. The list of narrowing criteria may include any criteria that would narrow the search results retrieved. For example, the criteria could include features such as number of bedrooms, number of bathrooms, square footage, location (i.e., near a golf course, near a lake, etc.).

FIG. 12 illustrates a data presentation display 1200 that permits user 106 to select the order in which the search results are to be presented. User 106 may be given options 1202, 1204, 1206, 1208 to choose from. In the illustrated embodiment, the results can be sorted by proximity to user's 106 present location 1202, in descending order starting with the most expensive property 1204, in ascending order beginning with the least expensive property 1206, and by property rating 1208. The property rating 1208 is a proprietary rating determined on the basis of the condition of the property, the location of the property, and the list price of the property.

There may be an infinite number of displays and search criteria screens that allow user 106 to narrow or expand their search for a particular landmark. The present invention is not limited to the number of search screens illustrated and disclosed above. For example, in another embodiment of the invention, there may be a single search screen without the ability to define search criteria. In another embodiment, user 106 may be able to decide to what extent they desire to narrow the search and execute the search prior to viewing all of the criteria narrowing search screens described above.

The embodiments described above allow user 106 to retrieve information about a particular landmark near which they are located. If a person is looking for a house, apartment, or other property to rent or purchase, the property near which they are located may not be for sale or rent. But the person may like some of the features of the home or the general design. In that case, the person would benefit from knowing similar properties in the area that are for sale or rent.

In the embodiment illustrated in FIGS. 13–15, it is possible for user 106 to search for a landmark that has similar features or attributes as a landmark in front of which user 106 is located. In such a situation, user 106 may view similar search display 1300 that includes a similar search icon 1310. For example, if user 106 is located in front of a home that is not for sale, but user 106 would like to purchase a similar home, by choosing the appropriate location identifier 702, and similar search icon 1310, location-centric information system 110 may provide multiple location identifiers or addresses 1410 of second homes that are for sale having similar attributes to the first home. The results may be displayed in a similar search results screen 1400. When user 106 is presented with similar search results screen 1400 with multiple location identifiers 1410, user 106 may then choose a single location identifier or address about which to

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obtain more detailed information. User 106 may then be presented with a similar search address display 1500. From similar search address display 1500, user 106 may choose to receive a map 1520 to the second home, driving directions 1530 to the second home, and more information 1540 about the second landmark (e.g., sale price, school district, days on market, etc.). The search criteria may be more narrowly defined as described above with reference to FIGS. 7–12 such that only similar homes for sale within a certain radius, price range, etc. are shown.

User 106 may choose which attributes of the home in which they are interested to tailor the search to only include homes for sale that include that particular attribute. For example, if user 106 likes the style of the home (e.g., colonial, split-level) then user 106 may narrow the search criteria to only search for similar homes of a particular style.

The attributes contained in location-centric information system 110 include, but are not limited to, home style, parcel lot size, number of floors, number of bedrooms, number of bathrooms, roof style, window style, architect, builder, landscaping, garage features, kitchen features, flooring features, utility features, color, size, etc.

User 106 may also obtain detailed information about a particular attribute of a landmark in which they are interested. Referring to FIGS. 16–19, user 106 may be located in front of a landmark that has a particular feature (e.g., landscaping, windows, door, design) in which user 106 is interested. In such a situation, user 106 may view a feature search display 1600 that includes a feature search icon 1610. Upon choosing feature search icon 1610, user 106 views a feature selection display 1700 as illustrated in FIG. 17. Feature selection display 1700 allows user 106 to select the type of feature of interest such as interior feature 1710, exterior feature 1720, or service feature 1730. Interior features may include such features as lighting fixtures, plumbing fixtures, flooring, wallpaper, window treatments, molding, appliances, etc. Exterior features may include such features as roof type, windows, siding, shingles, etc. Service features may include such features as landscaping, gardening, sprinkler systems, pool care etc.

When user 106 selects a feature 1710, 1720, 1730, user 106 can view the narrow feature selection display 1800 as illustrated in FIG. 18. From narrow feature selection display 1800, user 106 selects the particular feature of interest from a list of features 1810. The illustrated example includes interior features, but may also include exterior features and service features as apparent. Upon selecting a particular feature, user 106 may be presented with a feature detail display 1900 that includes detailed feature information 1910. The detailed feature information includes specific information about the chosen feature of the particular landmark. The specific information may include contact information for service providers that either manufacture, sell, repair, etc. the particular feature. The detailed feature information may also include contact information for the architect that designed the landmark, service providers related to the landmark, etc. User 106 may desire to view another landmark including similar features as the landmark of interest. In such a situation, user 106 may be presented with similar search results screen 1400 and similar search address display 1500 as described above. In another embodiment, only features for which the location-centric information system has information are provided in the feature list 1810.

For example, if user 106 approached a house that had a certain color and style of brick that was desirable, user 106 would select feature search icon 1610. They would then

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choose exterior feature 1720 to obtain list 1810 that includes various exterior features. Upon selecting bricks or siding from list 1810, user 106 may be presented with detailed feature information. For example, the detailed feature information may include the manufacturer name, the specific manufacturer specifications for the particular bricks on the home of interest, contact information for the manufacturer, retailers that provide the particular product or similar products, contact information for those retailers, prices of the product, the particular mason or mason-sub-contractor that installed the brick, and other information associated with the brick could be provided or would be apparent etc. Contact information may be provided for particular categories of retailers or manufacturers. For example, in the present embodiment, where user 106 selected bricks from list of features 1810, detailed information regarding retailers and manufacturers of “building products” would be provided in detailed feature information 1910. Such detailed feature information 1910 could be provided for categories of service providers as well.

In another embodiment retailers and manufacturers advertise on location-centric information system 110. When user 106 selects a particular feature from list of features 1810, they may be presented with manufacturers, retailers, or service providers that provide the particular product or similar products or related services, but only if that manufacturer, retailer or service provider advertises on location-centric information system 110. The advertisement may be a paid advertisement or may be provided as a free service for simply registering with the provider of location-centric information system 110.

The principles, preferred embodiments, and modes of operation of the present invention have been described in the foregoing description. However, the invention that is intended to be protected is not to be construed as limited to the particular embodiments disclosed. Further, the embodiments described herein are to be regarded as illustrative rather than restrictive. Variations and changes may be made by others, and equivalents employed, without departing from the spirit of the present invention. Accordingly, it is expressly intended that all such variations, changes and equivalents which fall within the spirit and scope of the present invention as defined in the claims be embraced thereby.

We claim:

1. A method of retrieving location-centric information, comprising:
 - providing information related to a geographic position of a wireless device to an information system;
 - receiving from said information system at least one location identifier based on said geographic position information, said location identifier being representative of a landmark proximate to said geographic position; and
 - receiving location-centric information from said information system, said location-centric information related to said landmark proximate to the geographic position.
2. The method of claim 1, said receiving at least one location identifier includes receiving a plurality of location identifiers, said method further comprising:
 - receiving from a user a selection of one of said plurality of location identifiers; and
 - receiving location-centric information related to said selected location identifier.
3. The method of claim 1, wherein said receiving at least one location identifier includes receiving one of a street

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address, a name of a historic landmark, a building name, or a business name.

4. The method of claim 1, wherein said receiving location-centric information includes receiving residential unit information corresponding to a residential unit proximate to said geographic position.

5. The method of claim 1, wherein said receiving at least one location identifier includes receiving a street address of a residential unit and said receiving location-centric information includes receiving residential unit information.

6. The method of claim 5, wherein said receiving residential unit information includes receiving information describing at least one of sale price, realtor, floor plan, physical description, or owner contact information.

7. The method of claim 1, wherein said receiving at least one location identifier includes receiving a plurality of location identifiers including one of a plurality of street addresses, a plurality of historic landmark names, a plurality of building names, or a plurality of business names.

8. The method of claim 1, wherein said providing geographic position information includes:

providing geographic position information from a global positioning system.

9. The method of claim 1, wherein said providing geographic position information includes:

providing geographic position information over at least a portion of a wireless network.

10. The method of claim 1, wherein said providing geographic position information includes:

providing geographic position information, said geographic position information being determined by the wireless device.

11. The method of claim 1, wherein said providing geographic position information includes:

providing geographic position information, said geographic position information first being received by the wireless device.

12. A method of providing location-centric information from an information system, the method comprising:

receiving geographic position information associated with a wireless device, the geographic position information including a geographic position of the device;

transmitting to the wireless device at least one location identifier based on said received geographic position information, said location identifier corresponding to a landmark proximate to said geographic position; and

transmitting to the wireless device location-centric information related to said landmark proximate to said geographic position.

13. The method of claim 12, wherein said transmitting to the wireless device location-centric information includes transmitting residential unit information corresponding to a residential unit proximate to the geographic position.

14. The method of claim 12, wherein said transmitting at least one location identifier includes transmitting a street address of a residential unit and said transmitting location-centric information includes transmitting residential unit information.

15. The method of claim 12, wherein said transmitting at least one location identifier includes transmitting one of a street address, a historic location name, a building name, and a business name.

16. The method of claim 15, said transmitting at least one location identifier including transmitting a plurality of location identifiers, wherein said transmitting a plurality of location identifiers includes transmitting one of a plurality of

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street addresses, a plurality of historic location names, a plurality of building names, and a plurality of business names.

17. The method of claim 12, wherein said receiving geographic position information includes receiving geographic position information over at least a portion of a wireless network.

18. A wireless device, comprising:

a transmitter operable with a position determining system capable of providing geographic position information including a geographic position of the wireless device to an information system, the information system having location-centric information;

a receiver configured to receive from said information system location-centric information based on said geographic position; and

an output device configured to output a location identifier received from said location-centric information system and said received location-centric information.

19. The wireless device of claim 18, wherein said output device is a display configured to display said location identifier and said received location-centric information.

20. The wireless device of claim 18, wherein said output device is an audio device configured to output said location identifier and said received location-centric information.

21. The wireless device of claim 19, said location identifier including a plurality of location identifiers, further comprising:

an input device configured to allow a user to select one of said plurality of location identifiers.

22. The wireless device of claim 21, said input device including one of a keyboard, a touch screen, and a microphone.

23. Computer executable software code stored on a computer readable medium operable with a wireless device, the code for:

providing information related to a geographic position associated with a wireless device to an information system;

receiving a plurality of location identifiers from said information system; and

receiving location-centric information from said information system, said location-centric information related to a landmark proximate to the geographic position.

24. The computer executable software code of claim 23, the code further comprising code for:

prompting a user to select one location identifier from the plurality of location identifiers;

receiving location-centric information related to said selected location identifier; and

displaying said received location-centric information.

25. A system, comprising:

an information database having location-centric information and at least one location identifier; and

a wireless device operable to provide geographic position information related to said wireless device to said information database, to receive from said information database said at least one location identifier corresponding to a landmark proximate to said geographic position, and to receive location-centric information related to said landmark.

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26. A method of retrieving real estate information for a particular unit of real estate, comprising:

receiving from an information system at least one street address based on a geographic position of a wireless device located proximate to said geographic position, said street address being representative of said particular unit of real estate proximate to geographic position; and

receiving from said information system real estate information related to said particular unit of real estate.

27. A method of locating a landmark, comprising:

providing geographic position information of a wireless device to an information system, the information system including at least a first location identifier, said first location identifier being representative of a first landmark proximate to said geographic position and having associated first location-centric information including at least one attribute descriptive of said first landmark;

receiving from said information system, a second location identifier representative of a second landmark, said

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second location identifier having associated second location-centric information including said at least one attribute.

28. A method of locating a landmark, comprising:

providing geographic position information of a wireless device to an information system, the information system including at least a first location identifier, said first location identifier being representative of a first landmark proximate to said geographic position and having associated first location-centric information including a plurality of attributes descriptive of said first landmark;

receiving from said information system, a second location identifier representative of a second landmark, said second location identifier having associated second location-centric information including at least one of said plurality of attributes.

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JS 44 (Rev. 11/04)

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON THE REVERSE OF THE FORM.)

I. (a) PLAINTIFFS

Smarter Agent Inc., a Delaware Corporation

(b) County of Residence of First Listed Plaintiff New Castle, Delaware
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorney's (Firm Name, Address, and Telephone Number)

Thomas H. Kovach (#3964), Pepper Hamilton LLP, 1313 Market Street, P.O. Box 1709, Wilmington, DE 19899 (302) 777-6505

DEFENDANTS

uLocate Communications, Inc., a Delaware Corporation

County of Residence of First Listed Defendant New Castle, Delaware
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | | | | | |
|---|----------------------------|----------------------------|---|---------------------------------------|---------------------------------------|
| | PTF | DEF | | PTF | DEF |
| Citizen of This State | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 | Incorporated or Principal Place of Business In This State | <input checked="" type="checkbox"/> 4 | <input checked="" type="checkbox"/> 4 |
| Citizen of Another State | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 | Incorporated and Principal Place of Business In Another State | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Citizen or Subject of a Foreign Country | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 | Foreign Nation | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

| CONTRACT | TORTS | FORFEITURE/PENALTY | BANKRUPTCY | OTHER STATUTES | |
|--|--|--|--|--|--|
| <input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excl. Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise | PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury | PERSONAL INJURY <input type="checkbox"/> 362 Personal Injury - Med. Malpractice <input type="checkbox"/> 365 Personal Injury - Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability | <input type="checkbox"/> 610 Agriculture <input type="checkbox"/> 620 Other Food & Drug <input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 630 Liquor Laws <input type="checkbox"/> 640 R.R. & Truck <input type="checkbox"/> 650 Airline Regs. <input type="checkbox"/> 660 Occupational Safety/Health <input type="checkbox"/> 690 Other LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Mgmt. Relations <input type="checkbox"/> 730 Labor/Mgmt. Reporting & Disclosure Act <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Empl. Ret. Inc. Security Act | <input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input checked="" type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609 | <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 810 Selective Service <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 875 Customer Challenge 12 USC 3410 <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 892 Economic Stabilization Act <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 894 Energy Allocation Act <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 900 Appeal of Fee Determination Under Equal Access to Justice <input type="checkbox"/> 950 Constitutionality of State Statutes |
| REAL PROPERTY <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property | CIVIL RIGHTS <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 444 Welfare <input type="checkbox"/> 445 Amer. w/Disabilities - Employment <input type="checkbox"/> 446 Amer. w/Disabilities - Other <input type="checkbox"/> 440 Other Civil Rights | PRISONER PETITIONS <input type="checkbox"/> 510 Motions to Vacate Sentence Habeas Corpus: <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty <input type="checkbox"/> 540 Mandamus & Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition | | | |

V. ORIGIN

(Place an "X" in One Box Only)

- ☒ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from another district (specify) ☐ 6 Multidistrict Litigation ☐ 7 Appeal to District Judge from Magistrate Judgment

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):

35 U.S.C. §§ 101 et. seq.

Brief description of cause:

Action for Patent Infringement

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER F.R.C.P. 23

DEMAND \$

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE

DOCKET NUMBER

DATE

03/23/2007

SIGNATURE OF ATTORNEY OF RECORD



FOR OFFICE USE ONLY

RECEIPT # _____ AMOUNT _____ APPLYING IFP _____ JUDGE _____ MAG. JUDGE _____

AO FORM 85 RECEIPT (REV. 9/04)

United States District Court for the District of Delaware

Civil Action No. 07-171

ACKNOWLEDGMENT
OF RECEIPT FOR AO FORM 85

NOTICE OF AVAILABILITY OF A
UNITED STATES MAGISTRATE JUDGE
TO EXERCISE JURISDICTION

I HEREBY ACKNOWLEDGE RECEIPT OF 2 COPIES OF AO FORM 85.

3/23/07
(Date forms issued)

X Dustin Frohlich
(Signature of Party or their Representative)

X Dustin Frohlich
(Printed name of Party or their Representative)

Note: Completed receipt will be filed in the Civil Action